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Remarks

Reconsideration of the application and allowance of all claims pending are respectfully requested. These amendments to the claims constitute a bona fide attempt by applicants to advance prosecution of the application and obtain allowance of certain claims, and are in no way meant to acquiesce to the substance of the rejections. Claims 1-16, 18-22 and 25-26 are pending.

Applicants gratefully acknowledge the indication of allowable subject matter in claims 2, 7-12 and 17-22.

Claim Rejection - 35 U.S.C. §103:

Claims 1 and 3 are rejected under 35 U.S.C. §103 as being unpatentable over U.S. Patent Publication No. 2002/0054578 (Zhang). This rejection is respectfully traversed.

For explanatory purposes, applicants discuss herein one or more differences between the applied reference and the claimed invention with reference to one or more parts of the applied reference. This discussion, however, is in no way meant to acquiesce in any characterization that one or more parts of the applied reference correspond to the claimed invention.

Claim 1 is directed to a method for a radio link control (RLC) that allows for at least partial recovery of a streaming service over a wireless communication channel. The play out time for each RLC block is determined as a function of block size, play out rate and allowed delay for each transmission. Recovery for an RLC block is aborted if the block is not received by a respective play out time. The RLC blocks that have been received within the respective play out time are recovered.

With regard to the determining of a play out time in claim 1, it is important understand how "play out time" is to be interpreted in accordance with the specification. The play out time, as used in the specification and hence the meaning that must be attributed to this phrase in considering the claims, means a time at which information contained within an RLC block is to

be transmitted from the RLC receiver to another destination, i.e. typically to another layer. See the specification, p. 4, lines 7-10. Stated another way, play out time is the time at which the recovered information must be transmitted to stay in time sequence with a flow of information being transmitted.

Claim 1 requires "determining a play out time for each RLC block as a function of block size, play out rate and allowed delay for each transmission." The play out time itself as well as the other requirements of the play out time is not taught by Zhang.

Zhang, at page 5, paragraph 84, (the portion cited and relied upon in the Office Action) states in pertinent part:

Here there is a new kind of ARQ, which named delay-bounded ARQ. This is a limited retransmission ARQ protocol, i.e. if a packet does not arrive after certain time interval, it gives up and passes the loss to higher layers

In the Office Action it was stated:

Zhang teaches a delay-bounded ARQ method on page 5, paragraph 84 where if a packet does not arrive after a certain time interval (play out time), the recovery is given up (aborted) and the loss is passed (acknowledgement) to higher layers. Zhang does not explicitly express the certain time interval (play out time) as a function of block size, play out rate, and allowed delay for each transmission. However, it would be obvious to someone skilled in the art to base the play out time on parameters such as these in order to efficiently regulate block recovery in accordance with each specific transmission.

MPEP §706.02(j) states: "To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)."

(Emphasis added.)

Zhang does mention a delay-bounded ARQ, wherein if a packet does not arrive after “a certain time interval”, it gives up. In the Office Action (cited above) the “certain time interval” was alleged to correspond to the play out time of claim 1. However, Zhang does not teach or suggest that the certain time interval is based on or even related to play out time. Zhang is silent on what the certain time interval means. One of ordinary skill in the art would likely understand the “certain time interval” as meaning a predetermined fixed amount of time. Hence, it is not inherent that the certain time interval of Zhang would be understood as the play out time of claim 1.

It is clear that the “certain time interval” of Zhang would not be understood as the play out time for each RLC block as a function of clock size, play out rate and allowed delay for each transmission. As required by the legal precedent cited above, the prior art reference must teach all the claim limitations to support a prime facie 103 rejection. Zhang does not provide the required teachings as pointed out.

It was acknowledged in the Office Action that Zhang does not explicitly express the certain time interval (play out time) as a function of block size, play out rate, and allowed delay for each transmission. It was said be obvious to someone skilled in the art **to base the play out time on parameters such as these** in order to efficiently regulate block recovery in accordance with each specific transmission. Such reasoning is basically “an obvious to try” standard which has been held to be legally inappropriate.

Hindsight reconstruction based on applicants own teachings is not permitted. The reasoning offered amounts to no more than that. The efficient regulation of block recovery by the method of claim 1 is part of what applicants have discovered and claimed. The lack of teaching of the required elements of claim 1 by Zhang cannot merely be attributed to one of ordinary skill in the art, especially where clearly required elements are not disclosed in the applied reference(s). If such an approach was allowed, there would be virtually no issued patents since there is always some prior art related to a claim and the examiner could merely fill-in the missing gaps by

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attributing the missing elements as obvious to one of ordinary skill in the art based on the advantage achieved by the claimed invention. This methodology is not sanctioned.


Applicant traverses that one of ordinary skill in the art would deduce what is suggested in the Office Action, and requests the citation of prior art to support these requirements if the rejection is to be maintained.

Independent claim 13 is amended by incorporating the subject matter of claim 17, which was determined to contain allowable subject matter. Hence, it is believed that claim 13 is now allowable. No other independent claims are pending.

Pursuant to MPEP 706.07(c), it would be inappropriate to make an Office Action final should new references be applied in support of a rejection of any unamended claim since no amendments to these claims are present to necessitate a change of position.

In view of the above amendments and remarks, allowance of all claims pending is respectfully requested. If a telephone conference would be of assistance in advancing the prosecution of this application, the Examiner is invited to call applicants' attorney.

Respectfully submitted,



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